PE NUMBER: 0603260F
PE TITLE: Intelligence Advanced Development

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)							DATE February 2000		
BUDGET ACTIVITY 04 - Demonstration and Validation				PE NUMBER AND TITLE 0603260F Intelligence Advanced Development					
COST ($ in Thousands)	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	3,819	4,498	4,401	4,455	4,543	4,634	4,726	Continuing	TBD
643479 Advanced Sensor Exploitation	814	797	779	816	816	833	848	Continuing	TBD
643480 Automated Imagery Exploitation	775	1,287	1,256	1,313	1,311	1,338	1,364	Continuing	TBD
643481 Knowledge Based Tech For Intelligence	1,118	1,313	1,287	1,343	1,352	1,378	1,407	Continuing	TBD
643482 Science & Tech Intelligence Methodology	1,112	1,101	1,079	983	1,064	1,085	1,107	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0

(U)   A. Mission Description

(U) Intelligence Advanced Development (IAD) demonstrates and validates advanced technology required to support warfighter needs for timely all source intelligence information. IAD research supports global awareness, consistent battlespace knowledge, precision information, and the execution of time critical missions. IAD projects provide better on-time information to the warfighter using new and existing data sources, streamline data analysis, reduce footprint required, extend life of sensors in place and enhance performance. Air Force Research Lab Rome Research Site (AFRL/IFE) works directly with users, employing a rapid prototyping evolutionary approach, integrating finished modules directly into the field. The programs are oriented toward specific shortfalls and deficiencies as documented by the major commands (MAJCOMS), unified commands, and intelligence organizations in their mission and function area plans. The goal of this program is to expedite technology transition from the laboratory to operational use via rapid prototyping. This AF program is focused on technology insertion to correct AF intelligence deficiencies at tactical or operation levels. This program bridges the transition of Advance Technology Demonstrations (ATDs), Integrated Technology Thrust Programs (ITTPs), and supports Defense Technology Objectives (DTOs).

(U)   B. Budget Activity Justification

This program is in Demonstration and Validation, Budget Activity 4, because it demonstrates and validates advanced technology which enhances information / intelligence systems capabilities and techniques.

Exhibit R-2 (PE 0603260F)

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE February 2000
BUDGET ACTIVITY **04 - Demonstration and Validation**	PE NUMBER AND TITLE **0603260F Intelligence Advanced Development**

(U) **C. Program Change Summary ($ in Thousands)**

		FY 1999	FY 2000	FY 2001	Total Cost
(U)	Previous President's Budget (FY 2000 PBR)	4,602	4,534	4,442	TBD
(U)	Appropriated Value	4,615	4,534		
(U)	Adjustments to Appropriated Value				
	a. Congressional/General Reductions	-13			
	b. Small Business Innovative Research	-125			
	c. Omnibus or Other Above Threshold Reprogram		-36		
	d. Below Threshold Reprogram	-637			
	e. Rescissions	-21			
	f. Other				
(U)	Adjustments to Budget Years Since FY 2000 PBR			-41	
(U)	Current Budget Submit/FY 2001 PBR	3,819	4,498	4,401	TBD

(U) Significant Program Changes:
None

Page 2 of 18 Pages   Exhibit R-2 (PE 0603260F)

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)						DATE **February 2000**				
BUDGET ACTIVITY **04 - Demonstration and Validation**				PE NUMBER AND TITLE **0603260F Intelligence Advanced Development**						PROJECT **643479**

COST ($ in Thousands)	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
643479 Advanced Sensor Exploitation	814	797	779	816	816	833	848	Continuing	TBD

(U)   A. Mission Description

The project objectives are to develop, demonstrate and evaluate a near-real-time all source correlation/fusion capability by applying state-of-the-art data processing techniques for the receipt, correlation, templating and analysis of battlefield information. Capabilities will be developed in open systems architecture environment allowing for the greatest efficiency in terms of integrating or interfacing with other systems. There is an Air Force, DoD and Coalition need to correlate various sources of intelligence information (Communications Intelligence - COMINT, Electronic Intelligence - ELINT, Image Intelligence - IMINT) within seconds as opposed to hours with current manual methods. Project includes development of data correlation and predictive intelligence algorithms, target analysis and prioritization, air order of battle updates and tactical analysis techniques. This computerized approach will speed up the correlation of data from diverse sources of intelligence information, including COMINT, ELINT, and IMINT; providing faster situational awareness and threat assessment and replace manual systems with automated capabilities

(U)   FY 1999 ($ in Thousands)
(U) $398   Completed Consistent Operational Picture Via Distributed Fusion for Global Awareness.
(U) $198   Completed Enhanced Analytical Tools to Support Dynamic Situation Awareness.
(U) $218   Completed Predictive Fusion Algorithms to Support Dynamic Planning and Execution.
(U) $814   Total

(U)   FY 2000 ($ in Thousands)
(U) $210   Initiate Network Centric Information Fusion to support Dynamic Planning and Execution.
(U) $194   Initiate Data Fusion Architecture for Global Awareness.
(U) $393   Initiate Consistent Battlespace Picture Build II to support Dynamic Planning and Execution.
(U) $797   Total

(U)   FY 2001 ($ in Thousands)
(U) $393   Complete Network Centric Information to Support Dynamic Planning and Execution.
(U) $193   Continue Data Fusion Architecture for Global Awareness.
(U) $193   Continue Consistent Battlespace Picture Build II to support Dynamic Planning and Execution.
(U) $779   Total

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2000

BUDGET ACTIVITY **04 - Demonstration and Validation**	PE NUMBER AND TITLE **0603260F Intelligence Advanced Development**	PROJECT **643479**

(U) **B. Project Change Summary**

Not Applicable

(U) **C. Other Program Funding Summary ($ in Thousands)**

	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost

(U) RELATED ACTIVITIES

62720F C3I Exploratory Development: information exploitation (imagery/video/text), multi-sensor collaboration, global information base.

63789F C3 Advanced Technology Development: correlation, fusion algorithms, visualization.

63726F C3 Subsystem Integration: advanced information applications, advanced memory technology.

64750F Intelligence Equipment: modeling and simulation, foreign threat assessment.

31335F Intelligence Data Handling: enhances DoD Intelligence Information Systems (DoDIIS).

(U) **D. Acquisition Strategy**

All major contracts within this Program Element were awarded after full and open competition.

(U) **E. Schedule Profile**

	FY 1999				FY 2000				FY 2001			
	1	2	3	4	1	2	3	4	1	2	3	4
(U) Consistent Operational Picture, Via Distributed Fusion Completed				*								
(U) Enhanced Analytical Tools Completed				*								
(U) Predictive Fusion Algorithms Completed				*								
(U) Network Centric Information Fusion Initiated										X		
(U) Data Fusion Architecture Initiated										X		
(U) Consistence Battlespace Picture Build II Initiated										X		

* - Denotes completed event

X - Denotes planned event

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	DATE February 2000

BUDGET ACTIVITY 04 - Demonstration and Validation	PE NUMBER AND TITLE 0603260F Intelligence Advanced Development	PROJECT 643479

(U)   A. Project Cost Breakdown ($ in Thousands)

		FY 1999	FY 2000	FY 2001
(U)	Consistent Operational Picture via Distributed Fusion	398		
(U)	Enhanced Analytical Tools	198		
(U)	Predictive Fusion Algorithms	218	210	193
(U)	Network Centric Information Fusion		194	393
(U)	Consistent Battlespace Picture Build II		393	193
(U)	Total	814	797	779

(U)   B. Budget Acquisition History and Planning Information ($ in Thousands)

(U)   Performing Organizations:

Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY 1999	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
Product Development Organizations										
Electic Computing Concepts 96-C-0045	CPFF				350	398	210	0	Continuing	TBD
BTG, Inc 97-C-0341	CPFF				100	198	194	0	Continuing	TBD
BTG, Inc 97-C-0341	CPFF				0	218	393	393	Continuing	TBD
Contractor TBD	TBD				0	0	0	193	Continuing	TBD
Contractor TBD	TBD				0	0	0	193	Continuing	TBD
Support and Management Organizations										
N/A										
Test and Evaluation Organizations										
N/A										

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	DATE February 2000

BUDGET ACTIVITY **04 - Demonstration and Validation**	PE NUMBER AND TITLE **0603260F Intelligence Advanced Development**	PROJECT **643479**

(U)   Government Furnished Property:

Item Description	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Delivery Date		Total Prior to FY 1999	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
Product Development Property										
N/A										
Support and Management Property										
Test and Evaluation Property										
					Total Prior to FY 1999	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
Subtotals										
Subtotal Product Development					450	814	797	779	TBD	TBD
Subtotal Support and Management										
Subtotal Test and Evaluation										
Total Project					450	814	797	779	TBD	TBD

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2000

BUDGET ACTIVITY 04 - Demonstration and Validation	PE NUMBER AND TITLE 0603260F Intelligence Advanced Development	PROJECT 643480

COST ($ in Thousands)	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
643480 Automated Imagery Exploitation	775	1,287	1,256	1,313	1,311	1,338	1,364	Continuing	TBD

(U) A. Mission Description

This project demonstrates and validates the capability to more accurately and quickly interpret digital imagery and video by evaluating computer assisted techniques to manipulate and overlay imagery, cartographic data, signal intelligence (SIGINT), and on line intelligence data. The result of this effort will be more precise target locations and identifications, precise target reference scenes, and more accurate damage assessments; all developed for easy supportability on low cost commercially available computer workstations

(U) FY 1999 ($ in Thousands)

(U)	$264	Completed Multi-Processor developmentfor Automated Image Exploitation.
(U)	$189	Completed Speech Technology for Image Exploitation.
(U)	$161	Completed Techniques for Secure Image Information Dissemination - Secure Steganography.
(U)	$161	Continued Distributed Imagery Information Systems Integration in support of Information Superiority (Phase 2).
(U)	$775	Total

(U) FY 2000 ($ in Thousands)

(U)	$856	Continue Distributed Imagery Information Systems Integration in support of Information Superiority (Phases 3, 4, and 5).
(U)	$431	Initiate Multi-Spectral/Hyper Spectral Image Exploitation Applications
(U)	$1,287	Total

(U) FY 2001 ($ in Thousands)

(U)	$867	Complete Distributed Imagery Information Systems Integration in support of Information Superiority (Phases 3, 4, and 5).
(U)	$389	Continue Multi-Spectral / Hyper-Spectral Image Exploitation Applications.
(U)	$1,256	Total

(U) B. Project Change Summary

Not Applicable

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2000

BUDGET ACTIVITY 04 - Demonstration and Validation	PE NUMBER AND TITLE 0603260F Intelligence Advanced Development	PROJECT 643480

(U)   C. Other Program Funding Summary ($ in Thousands)

	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost

(U)   Related Activities:

62720F C3I Exploratory Development: information exploitation (imagery / video / text), multi-sensor collaboration, global information base.

63789F C3 Advanced Technology Development: correlation, fusion algorithms, visualization.

63726F C3 Subsystem Integration: advanced imagery/information applications, advanced memory technology.

64750F Intelligence Equipment: modeling and simulation, foreign threat assessment.

31335F Intelligence Data Handling: enhances DoD Intelligence Information Systems (DoDIIS).

(U)   D. Acquisition Strategy

All major contracts within this Program Element were awarded after full and open competition.

(U)   E. Schedule Profile

		FY 1999				FY 2000				FY 2001		
	1	2	3	4	1	2	3	4	1	2	3	4
(U) Multi Processors for Automated Image Exploitation Completed		*										
(U) Speech Technology for Image Exploitation Completed				*								
(U) Secure Image Information Dissemination Completed				*								
(U) Multi Spectral / Hyper Spectral Image Applications Initiated					*							
(U) Distributed Imagery Information System Complete												X

* - Denotes completed event

X - Denotes planned even

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	DATE February 2000

BUDGET ACTIVITY 04 - Demonstration and Validation	PE NUMBER AND TITLE 0603260F Intelligence Advanced Development	PROJECT 643480

(U) **A. Project Cost Breakdown ($ in Thousands)**

	FY 1999	FY 2000	FY 2001
(U) Multi Processor for Automated Image Exploitation	264		
(U) Speech Technology for Image Exploitation	189		
(U) Secure Image Information Dissemination	161		
(U) Distributed Imagery Information System Integration	161	856	867
(U) Multi Spectral / Hyper Spectral Image Exploitation Applications		431	389
(U) Total	775	1,287	1,256

(U) **B. Budget Acquisition History and Planning Information ($ in Thousands)**

(U) **Performing Organizations:**

Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY 1999	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
Product Development Organizations										
Nichols Research 96-C-0083	CPFF	May 96			0	264	0	0	Continuing	TBD
State University of New York at Binghamton	CPFF	Jun 96			0	161	0	0	Continuing	TBD
97-C-0105	CPFF	Feb 98			0	189	0	0	Continuing	TBD
PAR, Inc. 98-C-0166	CPFF	Jun 98			0	161	429	481	Continuing	TBD
PAR, Inc.	TBD	TBD			0	0	431	389	Continuing	TBD
State University of New York at Binghamton	TBD	TBD			0	0	230	189	Continuing	TBD
Synectics	TBD	TBD			0	0	197	197	Continuing	TBD
Support and Management Organizations										
N/A										
Test and Evaluation Organizations										
N/A										

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	DATE **February 2000**

BUDGET ACTIVITY **04 - Demonstration and Validation**	PE NUMBER AND TITLE **0603260F Intelligence Advanced Development**	PROJECT **643480**

(U) <u>**Government Furnished Property:**</u>

Item Description	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Delivery Date		Total Prior to FY 1999	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
<u>Product Development Property</u>										
N/A										
<u>Support and Management Property</u>										
N/A										
<u>Test and Evaluation Property</u>										
N/A										
<u>Subtotals</u>					<u>Total Prior to FY 1999</u>	<u>Budget FY 1999</u>	<u>Budget FY 2000</u>	<u>Budget FY 2001</u>	<u>Budget to Complete</u>	<u>Total Program</u>
Subtotal Product Development					0	775	1,287	1,256	TBD	TBD
Subtotal Support and Management										
Subtotal Test and Evaluation										
Total Project					0	775	1,287	1,256	TBD	TBD

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2000

BUDGET ACTIVITY 04 - Demonstration and Validation	PE NUMBER AND TITLE 0603260F Intelligence Advanced Development	PROJECT 643481

COST ($ in Thousands)	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
643481 Knowledge Based Tech For Intelligence	1,118	1,313	1,287	1,343	1,352	1,378	1,407	Continuing	TBD

(U)   **A. Mission Description**

This project will improve Global Awareness, Dynamic Planning and Execution, providing knowledge bases and inference engines to exploit collected data to nine major commands on AF intelligence organizations. The development of the analytical aids is based on artificial intelligence techniques. The increased timeliness, efficiency and effectiveness derived will provide warning time and accuracy, allowing national/military authorities a greater range of options to avert, diminish or control a crisis.

(U)   FY 1999 ($ in Thousands)
(U) $242   Completed Enhancing Intelligence Analysts Productivity at AIA.
(U) $274   Continued Machine Learning Prototype, expert system and neural network technologies to support real-time analysis of timelines.
(U) $307   Continued Multimedia for Information Access for warfighters and analysts at AIA and users of Imagery.
(U) $295   Continued Intelligence Application Browser Interfaces for warfighters and analysts at ACC and AIA.
(U) $1,118   Total

(U)   FY 2000 ($ in Thousands)
(U) $488   Complete Machine Learning Prototype, expert system and neural network technologies to support real-time analysis of timelines.
(U) $488   Continue Multimedia for Information Access for analysts at AIA and users of Imagery.
(U) $337   Continue Intelligence Application Browser Interfaces for warfighters and analysts at ACC and AIA.
(U) $1,313   Total

(U)   FY 2001 ($ in Thousands)
(U) $488   Complete Multimedia for Information Access for analysts at AIA and users of Imagery.
(U) $488   Continue Intelligence Application Browser Interfaces for warfighters and analysts at ACC and AIA.
(U) $311   Initiate Secure Information Delivery by developing a Broadsword trusted transfer agent.
(U) $1,287   Total

(U)   **B. Project Change Summary**

Not Applicable

Project 643481	Page 11 of 18 Pages	Exhibit R-2A (PE 0603260F)

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2000

BUDGET ACTIVITY 04 - Demonstration and Validation	PE NUMBER AND TITLE 0603260F Intelligence Advanced Development	PROJECT 643481

(U)   C. Other Program Funding Summary ($ in Thousands)

	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost

(U)   Related Activities:

62720F C3I Exploratory Development: information exploitation (imagery/video/text), multi-sensor collaboration, global information base.

63789F C3 Advanced Technology Development: correlation, fusion algorithms, visualization.

63726F C3 Subsystem Integration: advanced information technology, advanced memory technology.

64750F Intelligence Equipment: modeling and simulation, foreign threat assessment.

31335F Intelligence Data Handling: enhances DoD Intelligence Information Systems (DoDIIS).

(U)   D. Acquisition Strategy

All major contracts within this Program Element were awarded after full and open competition.

(U)   E. Schedule Profile

	FY 1999				FY 2000				FY 2001			
	1	2	3	4	1	2	3	4	1	2	3	4
(U) (U) Enhancing Intelligence Analysts Productivity Completed				*								
(U) (U) Machine Learning Prototype Complete								X				
(U) (U) Multimedia Information Access Complete											X	
(U) (U) Secure Information Delivery Initiated												X

* - Denotes completed event
X - Denotes planned event

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	DATE February 2000

BUDGET ACTIVITY 04 - Demonstration and Validation	PE NUMBER AND TITLE 0603260F Intelligence Advanced Development	PROJECT 643481

(U)   A. Project Cost Breakdown ($ in Thousands)

		FY 1999	FY 2000	FY 2001
(U)	Enhancing Intelligence Analysts Productivity	242		
(U)	Machine Learning Prototype	274	488	
(U)	Multimedia for Information Access	307	488	488
(U)	Intelligence Applications Browser Interfaces	295	337	488
(U)	Secure Information Delivery			311
(U)	Total	1,118	1,313	1,287

(U)   B. Budget Acquisition History and Planning Information ($ in Thousands)

(U)   Performing Organizations:

Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY 1999	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
Product Development Organizations										
GTE 96-C-0085	CPFF	May 96			200	274	488		Continuing	TBD
Booz Allen 96-C-0092	CPFF	Jun 96			58	242			Continuing	TBD
Kaman Science 97-C-0053	CPFF	May 96			0	307	488	488	Continuing	TBD
Synectics Corp 97-C-0073	CPFF	Jul 96			0	295	337	488	Continuing	TBD
Contractor TBD	TBD	TBD			0	0	0	311	Continuing	TBD
Support and Management Organizations										
N/A										
Test and Evaluation Organizations										
N/A										

(U)   Government Furnished Property:

Item Description	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Delivery Date	Total Prior to FY 1999	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	DATE February 2000	
BUDGET ACTIVITY 04 - Demonstration and Validation	PE NUMBER AND TITLE 0603260F Intelligence Advanced Development	PROJECT 643481

(U)   Government Furnished Property Continued:

Item Description	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Delivery Date	Total Prior to FY 1999	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
Product Development Property									
N/A									
Support and Management Property									
N/A									
Test and Evaluation Property									
N/A									
Subtotals				Total Prior to FY 1999	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
Subtotal Product Development				258	1,118	1,313	1,287	TBD	TBD
Subtotal Support and Management									
Subtotal Test and Evaluation									
Total Project				258	1,118	1,313	1,287	TBD	TBD

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2000

BUDGET ACTIVITY 04 - Demonstration and Validation	PE NUMBER AND TITLE 0603260F Intelligence Advanced Development	PROJECT 643482

COST ($ in Thousands)	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
643482 Science & Tech Intelligence Methodology	1,112	1,101	1,079	983	1,064	1,085	1,107	Continuing	TBD

(U) **A. Mission Description**

Demonstrates and validates intelligence methodologies and techniques for operational employment of simulation models in support of Air Intelligence Agency (AIA) requirements. The methods and techniques will help AIA improve their analysis of current and future foreign weapon systems, and prevent technological surprises with regard to the capabilities of these systems.

(U) FY 1999 ($ in Thousands)
(U) $397   Completed Applied Deception Techniques for Manipulative Deception of Foreign Signal Collection Systems
(U) $397   Continued Intelligence Analyst Associate (Build 2) for Automated Information Extraction
(U) $318   Continued Missile System Reentry Vehicle Algorithm Enhancements for NAIC
(U) $1,112   Total

(U) FY 2000 ($ in Thousands)
(U) $390   Continue Intelligence Analyst Associate (Build 2) for Automated Information Extraction.
(U) $390   Continue Missile System Reentry Vehicle Algorithm Enhancements for NAIC.
(U) $321   Continue Radio Frequency Weapons Modeling Improvements (HEIMDAL2+) (includes   Laser Weapons Modeling Code (LODUR). (Reference companion PE 64750, Intelligence Equipment.)
(U) $1,101   Total

(U) FY 2001 ($ in Thousands)
(U) $390   Complete Intelligence Analyst Associate (Build 2) for Automated Information Extraction.
(U) $390   Continue Missile System Reentry Vehicle Algorithm Enhancements for NAIC.
(U) $299   Continue Radio Frequency Weapons Modeling Improvements (HEIMDAL2+) (includes   Laser Weapons Modeling Code (LODUR).   (includes Laser Weapons Modeling Code (LODUR). (Reference companion PE 64750, Intelligence Equipment.)
(U) $1,079   Total

(U) **B. Project Change Summary**
Not Applicable

Project 643482   Page 15 of 18 Pages   Exhibit R-2A (PE 0603260F)

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2000

BUDGET ACTIVITY 04 - Demonstration and Validation	PE NUMBER AND TITLE 0603260F Intelligence Advanced Development	PROJECT 643482

(U)   **C. Other Program Funding Summary ($ in Thousands)**

	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost

(U)   Related Activities:

62720F C3I Exploratory Development: information exploitation(image/video/text), multi-sensor collaboration, global information base.

63789F C3 Advanced Technology Development: correlation, fusion algorithms, visualization.

63726F C3 Subsystem Integration: advanced information technology, advanced memory technology.

64750F Intelligence Equipment: modeling and simulation, foreign threat assessment.

31335F Intelligence Data Handling: enhances DoD Intelligence Information Systems (DoDIIS).

(U)   **D. Acquisition Strategy**

All major contracts within this Program Element were awarded after full and open competition.

(U)   **E. Schedule Profile**

		FY 1999				FY 2000				FY 2001		
	1	2	3	4	1	2	3	4	1	2	3	4

(U)   Applied Deception Techniques Completed   * (FY1999 Q4)

(U)   Radio Frequency Modeling Continuing (under this PE as well as PE 64750)   X (FY2000 Q2)

(U)   Intel Analyst Associate (Build 2) Completed   X (FY2001 Q4)

* - Denotes completed event

X - Denotes planned event

Project 643482	Page 16 of 18 Pages	Exhibit R-2A (PE 0603260F)

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	DATE February 2000
BUDGET ACTIVITY **04 - Demonstration and Validation**	PE NUMBER AND TITLE **0603260F Intelligence Advanced Development** PROJECT **643482**

(U)   A. Project Cost Breakdown ($ in Thousands)

	FY 1999	FY 2000	FY 2001
(U) Applied Deception Techniques	397		
(U) Intelligence Analysts Associate (Build 2)	397	390	390
(U) Missile System Reentry Vehicle Algorithm Enhancement	318	390	390
(U) Radio Frequency (RF) Modeling		321	299
(U) Total	1,112	1,101	1,079

(U)   B. Budget Acquisition History and Planning Information ($ in Thousands)

(U)   Performing Organizations:

Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY 1999	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
Product Development Organizations										
Calspan 96-C-0108	CPFF	Sep 96			87	397	390	390	Continuing	TBD
E-Systems 96-C-0194	CPFF	Sep 96			19	397	0	0	Continuing	TBD
Calspan 96-C-0108	CPFF	Jul 98			0	318	390	390	Continuing	TBD
Contractor TBD	TBD	TBD			0	0	321	299	Continuing	TBD
Support and Management Organizations										
N/A										
Test and Evaluation Organizations										
N/A										

(U)   Government Furnished Property:

Item Description	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Delivery Date		Total Prior to FY 1999	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
Product Development Property										
N/A										

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	DATE **February 2000**

BUDGET ACTIVITY **04 - Demonstration and Validation**	PE NUMBER AND TITLE **0603260F Intelligence Advanced Development**	PROJECT **643482**

(U) Government Furnished Property Continued:

Support and Management Property

N/A

Test and Evaluation Property

N/A

Subtotals	Total Prior to FY 1999	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
Subtotal Product Development	106	1,112	1,101	1,079	TBD	TBD
Subtotal Support and Management						
Subtotal Test and Evaluation						
Total Project	106	1,112	1,101	1,079	TBD	TBD